

# Tyres: the basics

David Stokes treads through the theory and the leading suppliers.

When the subject of tyres for greenkeeping equipment is brought up, the main concern of greenkeepers is the effect that any tyre will have on their precious grass. Ever more complex and

sophisticated equipment means more weighty equipment, so the main contact the plant has with the turf is through its tyres.

As in most things in life, there are conflicts and compromises and tyres for greenkeeping equipment are no exception. The advances in recent years in low ground pressure (lgp) tyres have

made it possible to drive a tractor across some turf without too much damage to either the soil or the grass. For a tractor to move across some turf there are many forces at work, including weight. A machine shod with ordinary agricultural tyres will compact the soil and cause ruts. With wide wheels and low pressure tyres the weight is spread out over a large 'footprint', one aims for a pounds per square inch in single figures.

Also the tractive forces caused by the driving wheels could scuff and smear the surface so the large 'footprint' is important to combat damage in a wheel that revolves in line with the machine. The wheels that steer the tractor, however, exert an entirely different force and with the wrong tyres can cause tearing, scuffing and smearing. Just because a wheel has no part in the tractive effort doesn't mean it has an unimportant effect on the turf.

If the steering wheels of a tractor are non-powered most of the operators fit a ribbed tyre, this gives a lot of sideways grip without tearing the turf. However, if the tractor is a four-wheel drive then the same sort of tread will need to be fitted to the front wheels as are fitted to the rear. If the tractor is four-wheel drive, care must be taken in choosing the correct size of wheel and tyre so not to upset the gear ratios. Failure to do so will result in the wheels turning at different speeds causing damage to both turf and the tractor.

The fact that a trailer is a passive piece of equipment doesn't mean it has no effect on the turf. A loaded trailer can cause a lot of damage, so the lgp tyres are

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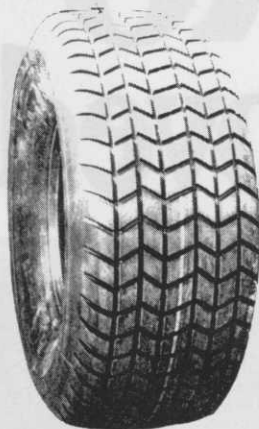
essential. This consideration must also apply to other pieces of greenkeeping equipment, even the jockey wheel on a trailer should be suitable so it doesn't damage the turf and lead to upset from the members.

One of the main players in the tyres for greenkeepers is Undergear. This company is the exclusive agent for Goodyear Tera-Tires, a low ground pressure tyre for the amenity industry. They maintain a stock in excess of £1million worth of tyres, wheels and axle components at their warehouses in West Bromwich.

Trelleborg market their Gentle Giants and offer their Twin 404 for the amenity market, their boast is that they sell tyres for trailer jockey wheels to the driving wheels for 100hp tractors, all for greenkeepers.

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